

I claim:

1. A recording medium comprising a recorded program and data to be used in a program execution system including a program execution device that executes various programs, at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, and a display device that displays images outputted from said program execution device, wherein

said recorded program has a direction maintenance step by which if, along with a motion of any character on the display device, based on an operation instruction about a character motion direction, a switching is made from a first scene to a second scene on the display device and said operation instruction is maintained, and the direction of motion of said character in said second scene is maintained in coordination with the direction of motion of the character on a map in said first scene at least immediately before said switching is made.

2. The recording medium as described in claim 1, wherein if said first scene on the display device is to be drawn based on a coordinate transformation based on a first viewpoint and said second scene on the display device is to be drawn based on a coordinate transformation based on a second viewpoint, said direction maintenance step has a computation step that computes the direction of motion of said character based on said first viewpoint.

3. A recording medium comprising a program and data recorded thereon and which are to be used in a program execution system including a program execution device that executes various programs, at least one operation device into which are inputted

operation requests by the user as operation instructions to said program execution device, and a display device that displays images output from said program execution device, wherein said program comprises:

a first computation step which determines, from a motion vector of any character on the display device by current operation instructions as seen from a prescribed viewpoint, at least position coordinates of said character,

a viewpoint switching step that switches viewpoints if necessary, based on the position coordinates of said character,

a second computation step which, if a current operation instruction is maintained after said switching step, determines, from the motion vector of said any character by said operation instruction as seen from the previous viewpoint, at least the position coordinates of said character, and

an image drawing step that draws a three-dimensional image of said character based on the current viewpoint, in accordance with the position coordinates of said character obtained by said first computation step and second computation step.

4. A computer-readable and -executable program to be used in a program execution system including a program execution device that executes various programs, at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, and a display device that displays images outputted from said program execution device, said program comprising:

a direction maintenance step by which if the program, along with a motion of any character on the display device based on an operation instruction concerning a character

motion direction, a switching is made from a first scene to a second scene on the display device and said operation instruction is maintained, the direction of motion of said character in said second scene is maintained in coordination with the direction of motion of the character on a map in said first scene at least immediately before the switching is made.

5. A computer-readable and -executable program to be used in a program execution system including a program execution device that executes various programs, at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, and a display device that displays images output from said program execution device, the program comprising:

a first computation step which determines, from a motion vector of any character by current operation instructions as seen on the display device from the prescribed viewpoint, at least position coordinates of said character;

a viewpoint switching step which switches the current viewpoint if necessary based on the position coordinates of said character;

a second computation step which, if a current operation instruction is maintained after said switching step determines, from the motion vector of said any character by said operation instruction as seen from the previous viewpoint, at least the position coordinates of said character, and

an image drawing step that draws a three-dimensional image of said character based on the current viewpoint, in accordance with the position coordinates of said character obtained by said first computation step and second computation step.

6. A program execution system comprising:

a program execution device having a controller that executes various programs;  
at least one operation device into which are inputted operation requests by the user  
as operation instructions to said program execution device;  
a display device that displays images output from said program execution device;  
and

a direction maintenance means which is a program that is operated in said controller  
of said program execution device, said direction maintenance means if, along with a motion  
of any character based on an operation instruction concerning a direction of motion of a  
character on the display device, and a switching is made from a first scene to a second  
scene on the display device and said operation instruction is maintained, maintaining the  
direction of motion of said character in said second scene in coordination with the direction  
of motion of the character on a map in said first scene at least immediately before the  
switching is made.

7. In a program execution system as described in claim 6, wherein said  
direction maintenance means further comprises:

a computation means that computes the direction of motion of said character based  
on said first viewpoint  
if said first scene is to be drawn based on a coordinate transformation based on a  
first viewpoint and said second scene is to be drawn based on a coordinate transformation  
based on a second viewpoint.

8. A program execution system comprising:

a program execution device having a controller, and executing various programs;

at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device;

a display device that displays images outputted from said program execution device; and

an image processing means configured as program that operates in said controller in said program execution device; wherein

said image processing means includes:

a first computation means that determines, from a motion vector of any character by current operation instructions as seen on the display device from the prescribed viewpoint, at least the position coordinates of said character,

a viewpoint switching means that switches a current viewpoint if necessary based on the position coordinates of said character,

a second computation means that, if said operation instruction is maintained after said switching of viewpoint, determines, from the motion vector of said any character by said operation instruction as seen on the display device from the previous viewpoint, at least the position coordinates of said character, and

an image drawing means that draws a three-dimensional image of said character based on the current viewpoint, in accordance with the position coordinates of said character obtained by said first computation means and second computation means.

9. A program execution device to which can be connected at least an operation device that outputs operation requests by the user as operation instructions and a display device for displaying images, said program execution device comprising:

a direction maintenance means by which if, along with a motion of any character on the display device based on an operation instruction concerning a direction of motion of a character on the display device, a switching is made from a first scene to a second scene on the display device and said operation instruction is maintained, the direction of motion of said character in said second scene is maintained in coordination with the direction of motion of the character on the map in said first scene at least immediately before the switching is made.

10. A program execution device to which can be connected at least an operation device that outputs operation requests by the user as operation instructions and a display device for displaying images, the program execution device comprising:

a first computation means that determines, from a motion vector of any character on the display device by current operation instructions as seen on the display device from the prescribed viewpoint, at least position coordinates of said character,

a viewpoint switching means that switches a current viewpoint if necessary based on the position coordinates of said character,

a second computation means that, if said operation instruction is maintained after said switching of viewpoint, determines, from the motion vector of said any character by the operation instruction as seen from the previous viewpoint, at least the position coordinates of said character, and

an image drawing means that draws a three-dimensional image of said character based on the current viewpoint, based on the position coordinates of said character obtained by said first computation means and second computation means.

11. A recording medium comprising a program and data recorded thereon and which are to be used in a program execution system including a program execution device that executes various programs, at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, and a display device that displays images output from said program execution device, said program comprising:

a first computation step which determines position coordinates of a character on said display device from a motion vector of said character, said motion vector being determined by an operation instruction in accordance with a first motion coordinate system based on a first display device viewpoint,

a viewpoint switching step that switches viewpoints from a first display device viewpoint to a second display device viewpoint based on the position coordinates of said character on said display device, said second display device viewpoint having associated therewith a second motion coordinate system that differs from said first motion coordinate system,

a second computation step which, if said operation instruction is maintained during and immediately after said viewpoint switching step, determines position coordinates of said character in said second display device viewpoint from a motion vector of said character, said motion vector being determined in said second display device viewpoint by said maintained operation instruction in accordance with said first motion coordinate system, and

an image drawing step that draws a three-dimensional image of said character based on said first or second display device viewpoint, in accordance with the position coordinates of said character obtained by said first computation step and second computation step.

12. The recording medium as described in claim 11, wherein said motion vector of said character in said second display device viewpoint is determined in accordance with said second motion coordinate system once said maintained operation instruction is terminated.

13. A program execution system comprising:  
a program execution device having a controller, and executing various programs;  
a display device that displays images outputted from said program execution device;  
at least one operation device into which are inputted operation requests by the user as operation instructions to said program execution device, said operation instructions associated with movements of a character displayed on said display device;  
said display device further comprising a first viewpoint in which movements of said character is controlled in accordance with a first movement coordinate system, and a second viewpoint in which movements of said character is controlled in accordance with a second movement coordinate system,

an image processing means configured as a controller program that operates in said controller in said program execution device, wherein said image processing means further comprises:

a first computation means that determines position coordinates of said character in said first display device viewpoint, said position coordinates based on a first motion vector of said character in said first display device viewpoint in accordance with operation instructions,

a viewpoint switching means that switches from said first display device viewpoint to said second display device viewpoint if necessary based on the position coordinates of said character,

a second computation means that determines position coordinates of said character in said second display device viewpoint, said position coordinates based on a second motion vector of said character in said second display device viewpoint in accordance with operation instructions, and

an image drawing means that draws a three-dimensional image of said character in said first or second display device viewpoint, in accordance with the position coordinates of said character obtained by said first computation means and second computation means respectively,

wherein if said operation instruction is maintained during a switch from said first display device viewpoint to said second display device viewpoint, said second motion vector governing movement of said character in said second display device viewpoint is controlled in accordance with said first movement coordinate system, such that movement of said character is consistent between first and second display device viewpoints while said operation instruction is maintained during and immediately after the switch between said viewpoints, and

wherein once said operation instruction is terminated after said switch from said first display device viewpoint to said second display device viewpoint, said second motion vector governing movement of said character in said second display device viewpoint is controlled in accordance with said second movement coordinate system.

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